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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,935	03/26/2004	Yo Tsurumi	59558.00022	6426

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EXAMINER	
HOLMES, JUSTIN K	

ART UNIT	PAPER NUMBER
3681	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/809,935	TSURUMI, YO	
	Examiner	Art Unit	
	Justin K. Holmes	3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *2, 4, 7-11, 13, 15, 16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5,6,12 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Examiner acknowledges the Request for Continued Examination filed on October 13, 2006. The Response Under 37 CFR 1.116 filed on September 15, 2006 has been entered. Claims 2, 4, 7-11, 13, 15, and 16 have been withdrawn. Claims 1, 3, 5, 6, 12 and 14 are pending.

Drawings

2. The drawings were received on September 15, 2006. These drawings are acceptable. The objection to the Drawings as stated in the May 15, 2006 Office Action is withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 62233540 to Katada et al.

The Katada et al. patent teaches an oscillating inner gearing planetary gear system having an internal gear 8; an external gear 5_1, 5_2 which meshes with the internal gear 8; an eccentric body 3_1, 3_2 with oscillatingly rotates the external gear 5_1, 5_2; an input shaft 29; a middle shaft 2 which is arranged at a right angle to the input shaft 29, the middle shaft 2 having an orthogonal gear 28, the orthogonal gear 28 linking the middle shaft 2 to the input shaft 29 at a right angle, wherein the external gear 5_1, 5_2 is

oscillatingly rotated via the input shaft 29, the orthogonal gear 28, the middle shaft 2 and the eccentric body 3_1, 3_2. See Figs. 1 and 3, and pages 7 and 10 of the translated copy of the patent.

Regarding claim 12, the system further comprises an output member 16, and the middle shaft 2 is located in parallel to the output member. See Fig. 1 and pages 7 and 8 of the translated copy of the patent.

Accordingly, all the elements of claims 1 and 12 are anticipated by the Katada et al. patent.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3, 5, 6, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,699,152 to Tanaka in view of Japanese Patent No. 62233540 to Katada et al.

Regarding Claim 1, the Tanaka patent teaches an oscillating reduction gear 10 having an internal gear 21, external gears 19 that mesh with the internal gear 21, and eccentric members 17a and 17b that rotate to cause the external gears 19 to undergo oscillatory motion. See column 2, lines 45-49 and Fig. 1. An intermediate gear 30 has a large gear 30a that links the intermediate gear 30 with an input gear 25b and input shaft 25. The external gear oscillatingly rotates via the input shaft, the large gear, the

middle shaft and the eccentric members. See column 5, lines 19-43, and column 6, lines 1-3 and Fig. 1.

However, the Tanaka patent lacks a teaching of a middle shaft that is arranged at a right angle to the input shaft, the middle shaft having an orthogonal gear, the orthogonal gear linking the middle shaft to the input shaft at a right angle.

The Katada et al. patent teaches an oscillating inner gearing planetary gear system having an internal gear 8; an external gear 5_1, 5_2 which meshes with the internal gear 8; an eccentric body 3_1, 3_2 with oscillatingly rotates the external gear 5_1, 5_2; an input shaft 29; a middle shaft 2 which is arranged at a right angle to the input shaft 29, the middle shaft 2 having an orthogonal gear 28, the orthogonal gear 28 linking the middle shaft 2 to the input shaft 29 at a right angle, wherein the external gear 5_1, 5_2 is oscillating rotated via the input shaft 29, the orthogonal gear 28, the middle shaft 2 and the eccentric body 3_1, 3_2. See Figs. 1 and 3, and pages 7 and 10 of the translated copy of the patent.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Tanaka patent to include the input shaft arranged at a right angle to the middle shaft as taught in the Katada et al. patent in order to provide a smaller and more compact reduction system. See page 11 of the translation of the Katada et al. patent.

Regarding Claim 3, an eccentric member shaft 17 is disposed apart from the intermediate gear 30. See Fig. 1 of the Tanaka patent.

Regarding Claim 5, a plurality of bearing use holes 12a are provided in the basal disc 12, and a plurality of bearing use holes 14a are provided in the end plate 14. The bearing use holes 12a and 14a are used to hold tapered roller bearings 18 that are used to hold eccentric member shafts 17. Accordingly, a plurality of eccentric member shafts 17 are taught by the Tanaka patent. The eccentric member shafts 17 have a transmission gear 33 which mesh with a small gear 30b connected to the intermediate gear 30. Accordingly, all of the eccentric member shaft 17 transmission gears 33 mesh with the small gear 30b. Column 2, lines 33-47, and column 3, lines 34-47 and Fig. 1 of the Tanaka patent.

Regarding Claim 6, the intermediate gear 30 has a hollow structure. See Fig. 1 of the Tanaka patent.

Regarding Claim 12, the supporting unit 11 can rotate to form an output member. The intermediate gear 30 is parallel to the output member. See column 6, lines 1-3 and Fig. 1 of the Tanaka patent.

Regarding Claim 14, the eccentric member portions 17a and 17b oscillatingly rotate the external gears 19 and the supporting unit 11 is a hollow shaft with a hollow diameter portion 34a of the Tanaka patent.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3, 5, 6, 12 and 14 have been considered but are moot in view of the new ground(s) of rejection.

Facsimile Transmission

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on _____ (Date)

Typed or printed name of person signing this certificate:

_____

_____

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin K. Holmes whose telephone number is (571) 272-5930. The examiner can normally be reached on 8:00am to 4:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JKH
11/17/06

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